

## CLAIMS

We claim:

1. Method of providing access to electronic services via a secure access code, characterized by comprising the steps of:

displaying, via graphical user interface, a predetermined number of keys which are used to input the secure access code;

associating at least two variables with each individual key;

selecting, by the user, a key which corresponds to at least one of the variables.

2. Method of claim 1, wherein the predetermined number of characters assigned to each variable are alphanumeric characters.

3. The method of claim 1, wherein the variables are numbers.

4. The method of claim 1, wherein the variables are letters.

5. The method of claim 1, wherein the variables are a combination of letters and numbers.

6. The method of claim 1, wherein the variables are symbols.

7. Method of claim 1, wherein the predetermined number of characters are generated by a predetermined sequence.

8. The method of claim 7, wherein the variable are generated in accordance with a predetermined random sequence of combination of values.

9. The method of claim 8, wherein one combination is selected and displayed for each user.

1  
2           10.    Method of claim 1, wherein the user selects keys which are  
3 associated with the variables that correspond to the access code.  
4

5           11.    Method of claim 1, wherein the upon the successful verification  
6 of the access code, the user has access to a plurality of electronic services.  
7

8           12.    A virtual keyboard comprising:  
9           a predetermined number of keys for inputting an access code; and  
10          a predetermined number of variables associated with each key, wherein  
11 the user selects a key based on whether the variables correspond with some  
12 portion of the user's access code.  
13

14          13.    The virtual keyboard of claim 12, wherein there are at least two  
15 variables associated with key.  
16

17          14.    The virtual keyboard of claim 13, wherein the variables are  
18 numbers.  
19

20          15.    The virtual keyboard of claim 13, wherein the variables are  
21 letters.  
22

23          16.    The virtual keyboard of claim 13, wherein the variables are a  
24 combination of letters or numbers.  
25

26          17.    The virtual keyboard of claim 13, wherein the variables are  
27 symbols.  
28

1           18. The virtual keyboard of claim 13, wherein the variable are  
2 generated in accordance with a predetermined random sequence of  
3 combination of values.

4  
5           19. The virtual keyboard of claim 13, wherein one combination is  
6 selected and displayed for each user.

7  
8           20. The virtual keyboard of claim 12, where the user's access code is  
9 input by selecting the keys which are associated with values that correspond  
10 to the access code.

11  
12           21. A keypad, comprising:  
13 a plurality of keys, such that a user selects with the plurality of keys in  
14 such a manner as to input information; and  
15 a plurality of characters associated with each key of the plurality of  
16 keys, wherein the plurality of characters are representative individual  
17 elements of a secret codeword.

18  
19           22. A method of providing secure access, comprising the steps of:  
20 providing a plurality of keys by which a user can input a secure code;  
21 and  
22 associating two or more variables with each of the plurality of keys,  
23 such that a user selects a key in accordance with the value of the variables,  
24 wherein the value of the variable are determined from a predetermined set of  
25 combinations, and that a user is assigned a random set of variable values upon  
26 the use of the machine.

27  
28           23. A secure access terminal comprising;  
29 a graphical user interface, which allows a user to access secured

1 electronic information, wherein the graphic user interface displays five keys,  
2 each key having at least two variables associated there with; and  
3 assigning the variables from a group of possible combinations of  
4 variables and associating those variable with each of the keys, such that the  
5 user gains the right to perform certain transactions by selecting keys which  
6 have assigned variables that correspond to a secret code.

7  
8 24. A method for providing access to a secured terminal comprising  
9 the steps of:

10 inserting a bank issued card into a terminal to execute a  
11 transaction; and

12 displaying a selected keyboard to a user and requesting a  
13 personal identification number, such that the selected keyboard includes a  
14 predetermined number of keys, each individual key having at least two  
15 variables associated therewith.

16  
17 25. The method of claim 24, further comprising the steps of:

18 transmitting card information to a server;

19 verifying the authenticity of the bank issued card; and

20 determining which keyboard to display to the user.

21  
22 26. The method of claim 24, further comprising the steps of:

23 client inputs a personal identification number;

24 encrypting the personal identification number data and  
25 transmitting the data to a server; and

26 verifying the personal identification number and allowing a user  
27 to access various banking functions.

1           27.    The method of claim 24, wherein there are at least two variables  
2 associated with key.

3  
4           28.    The method of claim 24, wherein the variables are numbers.

5  
6           29.    The method of claim 24, wherein the variables are letters.

7  
8           30.    The method of claim 24, wherein the variables are a combination  
9 of letters or numbers.

10          31.    The virtual keyboard of claim 24, wherein the variables are  
11 symbols.